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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 18047 4/5/2001]

[Docket No. 99-CE-67-AD; Amendment 39-12166; AD 2001-07-01]

RIN 2120-AA64

Airworthiness Directives; DG Flugzeugbau GmbH Model DG-800B Sailplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to certain DG Flugzeugbau GmbH (DG Flugzeugbau) Model DG-800B sailplanes. This AD requires you to install an additional filter for the primer valve; inspect and align the exhaust system; modify the placement of the fuel lines if the fuel filter is installed at the front mounting point of the spindle drive; and secure the gas strut piston rod end using Loctite if the piston rod does rotate. This AD is the result of mandatory continuing airworthiness information (MCAI) issued by the airworthiness authority for Germany. The actions specified by this AD are intended to prevent failure of the fuel line, exhaust system, and piston rod of the gas strut, which could result in failure of the engine. Such failure could lead to loss of power during critical stages of flight.

DATES: This AD becomes effective on May 26, 2001.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of May 26, 2001.

ADDRESSES: You may get the service information referenced in this AD from DG Flugzeugbau, Postbox 41 20, D-76646 Bruchsal, Federal Republic of Germany; telephone: +49 7257-890; facsimile: +49 7257-8922. You may examine this information at the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 99-CE-67-AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; facsimile: (816) 329-4090.

SUPPLEMENTARY INFORMATION:

Discussion

What events have caused this AD? The Luftfahrt-Bundesamt (LBA), which is the airworthiness authority for the Federal Republic of Germany, recently notified FAA that an unsafe condition may exist on all DG Flugzeugbau Model DG-800B sailplanes equipped with a SOLO engine. The LBA reports that an extensive review of the service history revealed failures of the primer valve, exhaust system, fuel line, exhaust and piston rod of the gas strut for the engine.

What are the consequences if the condition is not corrected? The actions specified by this AD are intended to prevent failure of the fuel line, exhaust system, and piston rod of the gas strut, which could result in failure of the engine. Such failure could lead to loss of power during critical stages of flight.

Has FAA taken any action to this point? We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to certain DG Flugzeugbau Model DG-800B sailplanes. This proposal was published in the *Federal Register* as a notice of proposed rulemaking (NPRM) on January 9, 2001 (66 FR 1607). The NPRM proposed to require you to install an additional filter for the primer valve; inspect and align the exhaust system; modify the placement of the fuel lines if the fuel filter is installed at the front mounting point of the spindle drive; and secure the gas strut piston rod end using Loctite if the piston rod does rotate.

Was the public invited to comment? Interested persons were afforded an opportunity to participate in the making of this amendment. No comments were received on the proposed rule or the FAA's determination of the cost to the public.

FAA's Determination

What is FAA's final determination on this issue? After careful review of all available information related to the subject presented above, we have determined that air safety and the public interest require the adoption of the rule as proposed except for minor editorial corrections. We determined that these minor corrections:

- will not change the meaning of the AD; and
- will not add any additional burden upon the public than was already proposed.

Cost Impact

How many sailplanes does this AD impact? We estimate that this AD affects 6 sailplanes in the U.S. registry.

What is the cost impact of this AD on owners/operators of the affected sailplanes? We estimate the following costs to do the installation of an additional filter for the primer valve:

| Labor Cost | Parts Cost | Total Cost Per Sailplane | Total Cost on U.S. Operators |
|-----------------------------|---|---------------------------------|-------------------------------------|
| 2 workhours X \$60 = \$120. | Manufacturer will provide the parts at no cost. | \$120. | \$120 X 6 = \$720. |

We estimate the following costs to inspect and align the exhaust system:

| Labor Cost | Parts Cost | Total Cost for Each Sailplane | Total Cost on U.S. Operators |
|---------------------------|---|--------------------------------------|-------------------------------------|
| 1 workhour X \$60 = \$60. | Manufacturer will provide the parts at no cost. | \$60. | \$60 X 6 = \$360. |

We estimate the following costs to modify the placement of the fuel lines:

| Labor Cost | Parts Cost | Total Cost for Each Sailplane | Total Cost on U.S. Operators |
|---------------------------|---|--------------------------------------|-------------------------------------|
| 1 workhour X \$60 = \$60. | Manufacturer will provide the parts at no cost. | \$60. | \$60 X 6 = \$360. |

We estimate the following costs to secure the gas strut rod end:

| Labor Cost | Parts Cost | Total Cost for Each Sailplane | Total Cost on U.S. Operators |
|---------------------------|-------------------------------|--------------------------------------|-------------------------------------|
| 1 workhour X \$60 = \$60. | Manufacturer will provide the | \$60. | \$60 X 6 = \$360. |

parts at no cost.

Compliance Time of this AD

What will be the compliance time of this AD? Unless already done, the compliance times of this AD are:

| Compliance | Action |
|--|--|
| Within the next 3 calendar months after the effective date of this AD. | Install an additional filter for the primer valve. |
| Within the next 3 calendar months after the effective date of this AD. | Inspect and align the exhaust system. |
| Within the next 30 days after the effective date of this AD. | Modify the placement of the fuel lines. |
| Within the next 30 days after the effective date of this AD. | Remove the gas strut from the engine mount and secure the rod end using Loctite. |

Why is the compliance time presented in calendar time instead of hours time-in-service (TIS)?

Although the failures of the fuel line, exhaust system, and piston rod of the gas strut occur during flight, the condition is not a direct result of sailplane operation. A calendar time for compliance will ensure that the unsafe conditions are addressed on all sailplanes in a reasonable time period. Sailplane operation varies among operators. For example, one operator may use the sailplane 50 hours TIS in 3 months while it may take another 12 months or more to accumulate 50 hours TIS. In order to ensure that preventive and corrective actions are done in a timely manner, the compliance time for installing an additional filter for the primer valve and inspecting and aligning the exhaust system is required within the next 3 calendar months after the effective date of this AD, unless already done.

Because of the impact on safety, the compliance time for modifying the placement of the fuel lines and removing the gas strut from the engine mount and securing the rod end using Loctite is required within the next 30 days after the effective date of this AD, unless already done.

Regulatory Impact

Does this AD impact various entities? The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

Does this AD involve a significant rule or regulatory action? For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the final evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption "ADDRESSES".

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. FAA amends § 39.13 by adding a new AD to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-07-01 DG FLUGZEUGBAU GMBH: Amendment 39-12166; Docket No. 99-CE-67-AD.

(a) What sailplanes are affected by this AD? This AD affects the following sailplane models and serial numbers that are certificated in any category;

| Model | Serial Numbers |
|--------------------------|---|
| DG-800B with SOLO engine | 8-001 through 8-128 for paragraph (d)(1) of this AD |
| DG-800B with SOLO engine | 8-001 through 8-154 for paragraph (d)(2) of this AD |
| DG-800B with SOLO engine | all serial numbers for paragraphs (d)(3) through (4) of this AD |

(b) Who must comply with this AD? Anyone who wishes to operate any of the above sailplanes must comply with this AD.

(c) What problem does this AD address? The actions specified by this AD are intended to prevent failure of the fuel line, exhaust system, and piston rod of the gas strut, which could result in failure of the engine. Such failure could lead to loss of power during critical stages of flight.

(d) What actions must I accomplish to address this problem? To address this problem, you must do the following unless already done:

| Actions | Compliance | Procedures |
|--|---|---|
| (1) If the fuel filter is installed at the front mounting point of the spindle drive, modify the placement of the fuel lines. | Within the next 30 days after May 26, 2001 (the effective date of this AD). | Do this action following the Instructions paragraph of DG Flugzeugbau Technical Note (TN) No. 873/13, dated June 30, 1999. |
| (2) If there is no paint marking (torque putty) or if the marking proves that the piston rod rotates, remove the gas strut from the engine mount and secure the rod end using Loctite, then apply marking paint line (torque putty). | Within the next 30 days after May 26, 2001 (the effective date of this AD). | Do this action following the Instructions paragraph of DG Flugzeugbau TN No. 873/13, dated June 30, 1999, and the maintenance manual. |

| Actions | Compliance | Procedures |
|--|---|--|
| (3) Install an additional filter for the primer valve. | Within the next 3 calendar months after May 26, 2001 (the effective date of this AD). | Do this action following the Instructions paragraph of DG Flugzeugbau TN No. 873/12, dated March 9, 1999, and Working Instruction No. 1 for TN No. 873/12. |
| (4) Inspect and align the exhaust system. | Within the next 3 calendar months after May 26, 2001 (the effective date of this AD). | Do this action following the Instructions paragraph of DG Flugzeugbau TN No. 873/12, dated March 9, 1999, and Working Instruction No.2 for TN No. 873/12. |

(e) Can I comply with this AD in any other way? You may use an alternative method of compliance or adjust the compliance time if:

- (1) Your alternative method of compliance provides an equivalent level of safety; and
- (2) The Manager, Small Airplane Directorate, approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Small Airplane Directorate.

Note 1: This AD applies to each sailplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For sailplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(f) Where can I get information about any already-approved alternative methods of compliance? Contact Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64016; telephone: (816) 329-4144; facsimile: (816) 329-4090.

(g) What if I need to fly the sailplane to another location to comply with this AD? The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your sailplane to a location where you can accomplish the requirements of this AD.

(h) Are any service bulletins incorporated into this AD by reference? Actions required by this AD must be done in accordance with DG Flugzeugbau Technical Note No. 873/12 (including Working Instruction No. 1 and No. 2), dated March 9, 1999, and DG Flugzeugbau Technical Note No. 873/13, dated June 30, 1999. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. You can get copies from DG Flugzeugbau, Postbox 41 20, D-76646 Bruchsal, Federal Republic of Germany. You can look at copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(i) When does this amendment become effective? This amendment becomes effective on May 26, 2001.

Note 2: The subjects of this AD are addressed in German AD 1999-269, Effective Date: July 22, 1999, and German AD 1999-167, Effective Date: May 20, 1999.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; facsimile: (816) 329-4090.

Issued in Kansas City, Missouri, on March 27, 2001.

David R. Showers, Acting Manager, Small Airplane Directorate, Aircraft Certification Service.